

Appn. No. 09/894,608
Amendment dated Sep. 7 2005
Reply to Office Action of June 7, 2005
Docket No. 6169-208

IBM Docket No. BOC9-2000-0073

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of June 7, 2005 (Office Action). As this action is timely filed within the three-month shortened statutory period, no fees are believed due.

In paragraph 2 of the Office Action, Claims 1-9 and 11-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by the article by Pitt, *et al.*, titled "An Improved Auditory Interface for the Exploration of Lists," *ACM Multimedia 97* (hereinafter "Pitt"). Claim 10 was rejected in paragraph 4 of the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Pitt. Claims 3 and 13 were rejected in paragraph 1 of the Office Action under 35 U.S.C. § 112 for lack of antecedent basis for the limitation "said association."

Independent Claims 1, 7, and 11 have been amended to further emphasize certain aspects of Applicants' invention. Claim 17 has been added to claim additional aspects of the invention. Claims 3 and 13 have been amended to correct the insufficient antecedent basis noted in the Office Action. Claim 8 has been amended to correct a typographical error. The amendments and newly added claim are fully supported throughout the Specification, as discussed herein, and no new matter has been introduced.

I. Applicants' Invention

Applicants' invention is directed to the efficient presentation of items selected from one or more databases according to a user-designated criteria. One embodiment of the invention, typified by amended Claim 1, is a computer-implemented list presentation method. The method includes providing an audible prompt through a speech user interface. The audible prompt instructs a user to provide a speech input designating a search topic. In response to the user-provided speech input, items are selected from at

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least one database containing items corresponding to the search topic. (See, e.g., Specification, p. 8, line 16, through p. 9, line 5; p. 9, line 21, through p. 10, line 2.)

The method further includes dynamically grouping the selected items in a list based on sequentially positioned symbols in the selected items which are common to one another. The method additionally includes labeling each group of selected items, and audibly presenting each group label through the speech user interface. In response to a selection of one of the audibly presented group labels, according to the method, items in a group corresponding to the selected group label can be presented to a user through the speech user interface.

For example, a user might respond to a prompt by specifying the topic "Usability." Subsequently, related group labels would be presented, enabling the user to specify, for example, the group label "Human Factors." In this event, the user would be presented with a list of items from a group corresponding to such factors. (See, e.g., Specification, p. 8, line 26, through p. 9, line 2.)

Still another embodiment, as represented by amended Claim 7, is a list presentation system. The system includes a speech user interface for providing an audible prompt that instructs a user to provide a speech input designating a search topic. (Specification, p. 8; lines 9-25). The system also includes a grouping component for grouping selected items in a list based on sequentially positioned symbols in selected items which are common to one another. (Specification, p. 9, lines 6-13). Additionally, the system includes a data processor responsive to the user-provided speech input. The data processor selects items from at least one database containing items corresponding to the search topics, and dynamically groups the selected items in a list based on sequentially positioned symbols in selected items which are common to one another. The system further includes a group labeler for labeling each group of the selected items, and

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a presentation component for audibly presenting each group label and items in a group corresponding to a selected group label.

II. The Claims Define Over The Cited Reference

As noted above, independent Claims 1, 7, and 11 were rejected as anticipated by Pitt. Pitt is directed to a program for audibly presenting a list of DOS-style filenames in a manner that is intended to more closely replicate human organizational and speech patterns. (p. 56, col. 1 ; Abstract.) The program is intended to aid visually impaired computer users and is based on a series of experiments designed to establish how lists might be organized and spoken so as to assist a user in recalling a spoken directory-listing. (p. 51, col. 2 through p. 56, col. 1).

Based on the experimental results, the Pitt program entails sorting filenames into groups of items that preferably contain fewer than six filenames. The Pitt program further arranges the groups into a hierarchy. (p. 56, col. 1).

More particularly, Pitt's is a three-stage file-sorting program. During the first phase, the Pitt program places filenames that share a string of four or more characters in a group, then sorts each group such that any filenames that share a common "full" filename are placed into subgroups, and finally, sorts filenames within each sub-group based on "purely alphabetical" and numerical extensions. (p. 56, col. 2). In the second phase, any remaining filenames are sorted by their extension. In the third phase, any filenames not previously grouped are sorted into one of two groups: one containing filenames with extensions and the other containing filenames without an extension. (p. 56, col. 2).

Applicants respectfully maintain that Pitt fails to teach, either explicitly or inherently, each of the features of amended independent Claims 1, 7, and 11. Pitt only addresses grouping and sorting strings based on the length of each string and the number

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of characters in each that match characters contained in other strings. Moreover, Pitt is limited to a narrow class of character strings, namely those designating filenames. Pitt is completely silent, for example, on the selecting of items from one or more different databases. More particularly, Pitt provides no mechanism by which items can be selected from one or more such databases based on a designated search topic, as recited in amended independent Claims 1, 7, and 11.

Pitt's approach precludes this feature, and in general, Pitt is more limited than Applicants' invention. It should be borne in mind that Pitt was intended to provide organization for 8.3 styled filenames, and that in the related experimental work the experimenters enjoyed complete control over which filenames were created for the experiments. Extending Pitt beyond this limited framework to that encompassed by Applicants' invention suggests a potential for the creation of false categories.

Consider Pitt's example for placing in a group "any filenames which share a string of four or more characters," where the filenames are those discussed in Pitt: SORTING.C, SORTING.EXE, NEWSORT.C and NEWSORT.EXE. Since all share the string SORT, they would be placed in one group. This may work well enough for the experiment, but in practice there is a potential for creating false categories. For example, suppose there was a file named OLDNEWS.TXT that was in the directory with SORTING.C, SORTING.EXE, NEWSORT.C and NEWSORT.EXE. This would result in the creation of a spurious NEWS group that would contain NEWSORT.C, NEWSORT.EXE, and OLDNEWS.TXT. The group is spurious because the first two files have to do with sorting rather than news; nonetheless, the filenames still contain the character string "NEWS" in their filenames.

These limitations in Pitt preclude Pitt's performing in the same manner as Applicants' invention. With Applicants' invention, words in phrases can be processed rather than just strings that do not contain spaces between the string characters. The

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optional step of eliminating articles so as to focus on open-class words (nouns, verbs, adjectives, adverbs), is a step that would not be consistent with the limited type of strings to which Pitt's method applies.

Pitt accordingly fails to teach selecting items from at least one database containing items corresponding to the search topic, as recited in amended independent Claims 1, 7, and 11. It follows, that Pitt also inevitably fails to expressly or inherently teach providing, via a speech user interface, an audible prompt instructing a user to provide a speech input designating a search topic, as also recited in each of the amended independent claims; given Pitt's incapability for selecting items based on topic selection, such a feature would be useless in Pitt. Moreover, Pitt is not responsive to a user-provided speech input, either for indicating a search topic as recited in the claims or for another purpose. Indeed, Pitt explicitly relies on keypad cursor movements for enabling a user to move among the hierarchy of groups generated. (p. 57, col. 1 through p. 58, Col. 1). Accordingly, Pitt further fails to address allowing a user to provide speech input, let alone a speech input indicating a search topic a recited in amended independent Claims 1, 7, and 11.

Applicants respectfully submit that Pitt fails to expressly or inherently teach each of the features of amended independent Claims 1, 7, and 11, and that, therefore, the claims define over the prior art. Applicants further respectfully submit that whereas each of the other claims depends from one of these amended independent claims, the dependent claims likewise define over the prior art.

CONCLUSION

The Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Response, or if the

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Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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